

Appendix D

Data Validation Summary Report for the Site Investigation Performed at the “Former Transformer near Building 3798” (Parcel - 57Q) Fort McClellan, Calhoun County, Alabama

D1.0 Introduction

Level III data validation was performed on 100% of the environmental samples collected at Parcel - 57Q. The analytical data consisted of one sample delivery group (SDG), PK155701, which was analyzed by Quanterra Incorporated. In addition, an evaluation of the field split data, which was analyzed by the USACE-SAD laboratory is included in this report. The chemical parameters for which the samples were analyzed, are identified below:

Parameter (Method)
PCBs by SW-846 8082

D2.0 Procedures

The sample data were validated following the logic identified in the *USEPA Contract Laboratory Program National Functional Guidelines For Organic Review (February 1994)* for all areas except Blanks. *Region III National Functional Guidelines for Organic Data Review (June 1992)* were applied to the areas associated with blank contamination. Specific quality control (QC) criteria, as identified in the Quality Assurance Plan (QAP), analytical methods, and laboratory Standard Operating Procedures (SOP) were applied to all sample results. As the result of the use of Update III SW846 test methods for the analytical data and the application of the CLP guidelines during the validation process, there were instances where specific QC requirements for all target compounds were not defined. This primarily occurred in the organic, Gas Chromatograph (GC) and Gas Chromatograph/Mass Spectra (GC/MS) calibration areas and is due to the fact that the analytical methods are “performance-based,” and allows the use of average calibration responses, in lieu of, individual responses, which are defined by CLP

protocol. In light of applying CLP guidelines to SW846 methods and evaluating the usability of the data during the validation process, specific QC criteria were determined to address all target compounds and are identified in this report for each parameter, as well as, in the validation checklists, which function as worksheets. All completed validation checklists are on file in the Knoxville office. For those analytical methods not addressed by the CLP and Region III guidelines, the validation was based on the method requirements (I. e. SW846, CFR, SOPs) and technical judgement following the logic of the CLP validation guidelines.

D3.0 Summary of Data Validation Findings

The overall quality of the data was determined to be acceptable.

Individual validation reports have been prepared and the overall results of the validation findings are summarized in this report. The validation qualifier data entry verification report (Attachment A) is also provided. This is a complete listing of all of the analytical results and the validation qualifiers assigned for Parcel - 57Q. It also identifies the "use" column, which indicates which result to use in the event of a reanalysis. A listing of the validation qualifiers and the reason codes, along with their definitions is also found in Attachment A. The following section highlights the key findings of the data validation for each analysis.

D4.0 Analysis-Specific Data Validation Summaries

D4.1 PCBs by SW-846 8082

Overall, the data are of good quality and are usable as reported by the laboratory with the exceptions noted below. Data were reviewed for the following:

Holding Times. Technical holding time criteria were met for all project samples.

Initial and Continuing Calibration. All initial and continuing calibrations associated with the project samples met QC criteria.

Blanks. The 5X rule for contaminants found in the associated equipment rinses and method blanks was applied to all sample results. All were found to be acceptable.

Surrogate Recoveries. All surrogate recoveries are within acceptable QC ranges for the surrogates applied.

Matrix Spike/Matrix Spike Duplicate. MS/MSD and Laboratory Control Sample (LCS) was performed for the project samples and all QC criteria were met.

Field Duplicates. Original and field duplicate results were evaluated and no problems were identified.

Quantitation. Results quantified between the MDL and the RL, which the lab qualified as “J,” were qualified as estimated “J” unless blank contamination was present or the results were rejected. Results rejected in favor of a preferred result (e.g., due to dilution or reanalysis) were qualified as rejected “R.”

D5.0 Quality Assurance Field Split Sample Data Evaluation

Data from the quality assurance split samples supplied to IT by the USACE were reviewed for comparability to the original and field duplicate results. Relative percent differences were calculated and the results are summarized in this section.

Field Split Data for SDG PK155701

Original Sample ID KL0001	Field Dup ID KL0002	Field Split ID KL0003	Units	Compounds/ Elements	Original / Field Split RPD	% RSD
26	21	nd	mg/kg	Aroclor 1260	N/A	N/A

PCB. The FS lab reported no PCBs, however, original and FD samples detected Aroclor 1260 hits below the reporting limits. Differences attributed to non-homogeneity in soil samples and/or FS lab not reporting hits below the reporting limits.

ATTACHMENT A

DATA VALIDATION QUALIFIER ENTRY VERIFICATION REPORT